

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY**

Boston Edison Company)	
Cambridge Electric Light Company)	
Commonwealth Electric Company)	
d/b/a NSTAR Electric)	

D.T.E. 03-121

Comments of the
Solar Energy Business Association of New England
on the Settlement Agreement

The Solar Energy Business Association of New England (“SEBANE”) is pleased to submit to the Department of Telecommunications and Energy (“Department”) its comments regarding the Settlement Agreement filed by various parties on June 7, 2004. SEBANE urges the Department to approve the Settlement Agreement.

I. Procedural History

On January 16, 2004, Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company, d/b/a NSTAR Electric (“NSTAR”), filed proposed tariffs for standby rates for medium- and large-sized commercial and industrial customers who have their own on-site, self-generation facilities. The tariffs were to be effective on February 4, 2004. Department Notice of Public Hearing and Procedural Conference, January 20, 2004; NSTAR Electric, January 16, 2004 filing letter; Exh. NSTAR-HCL-1, p. 16 *et seq.*

In its Notice of Public Hearing and Procedural Conference of January 20, 2004, the Department indicated it would investigate NSTAR Electric's proposed tariffs in order to ensure that NSTAR Electric used an appropriate method for the calculation of standby or back-up rates. The Department also stated that it would investigate whether "(1) standby rates with their own on-site, self-generation facilities pay an appropriate share of distribution system costs; (2) distribution companies should recover their costs through fixed or variable charges; (3) standby rates should reflect embedded and/or incremental costs; and (4) distribution companies should offer firm and non-firm standby service."

On February 3, 2004, SEBANE petitioned to intervene in D.T.E. 03-121 and intervention was granted by the Hearing Officer on February 10, 2004. SEBANE notified the Department of its intent to file a direct case on February 27, 2004. This direct case was submitted on March 16, 2004 in the form of the pre-filed testimony of Andrew G. Greene of Navigant Consulting and Thomas S. Michelman of Boreal Renewable Energy Development. Exh. SEBANE-AGG-1 and CLF/SEBANE-TSM-1. Mr. Greene's testimony was also sponsored in part by Fuel Cell Energy, Inc. and Mr. Michelman's testimony was also sponsored by the Conservation Law Foundation ("CLF").

Messrs. Greene and Michelman were examined by the Department and cross-examined at an evidentiary hearing on May 4, 2004. Tr. Vol. 5, pp. 738 – 810.

On June 7, 2004, a group of parties filed a Settlement Agreement for the Department's approval. SEBANE is a signatory to that agreement, along with NSTAR Electric, Associated Industries of Massachusetts, the Division of Energy Resources, the Conservation Law Foundation, and the Joint Supporters.

II. The Settlement Agreement is Consistent with the Public Interest and should be Approved by the Department.

The Settlement Agreement is consistent with Department policy and is in the public interest. It should be approved by the Department.

The Settlement Agreement contains many laudable features. In these comments, SEBANE will focus on the aspects of the agreement relating to renewable generation and small generation.

A. The Settlement Agreement Exempts Renewable Generation from Standby Charges.

The Settlement Agreement is in the public interest because it exempts renewable generation, as defined by M.G.L. c. 40J, §4E(f), from standby charges. The record is clear that renewable generation creates many benefits for all ratepayers – both economic benefits and environmental benefits. Moreover, it is the well-established policy of the Commonwealth to promote renewable generation because of those benefits.

1. Renewable Generation should be Exempt because it Creates Economic and Environmental Benefits for Ratepayers.

There is clear and uncontroverted evidence in the record that renewable distributed generation (“DG”) creates significant benefits for all ratepayers.

First, renewable generation is closely correlated with system peaks, providing energy and capacity when it is most valuable and most critical to the needs of the grid. Although much renewable DG is intermittent resources, the conditions that drive its maximum output are the same factors that drive electric system peaks.

As Mr. Michelman explained, wind generation coincides with winter peaks because:

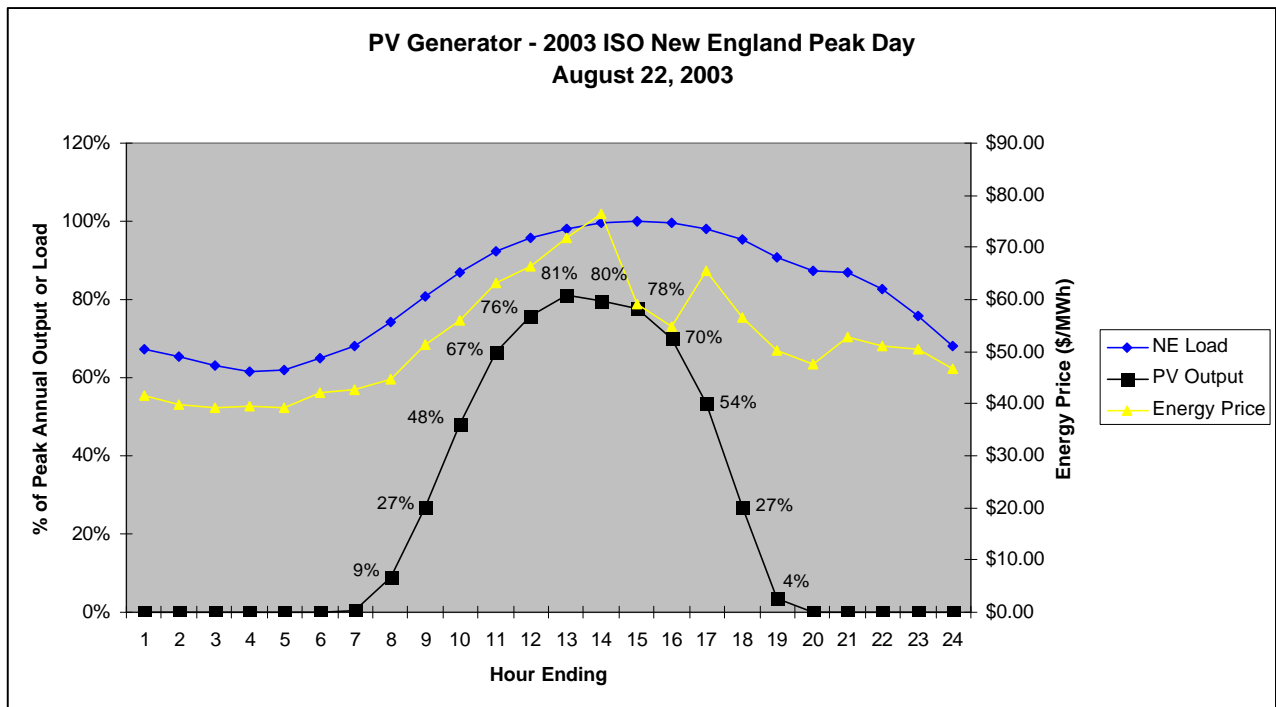
Conduction, convection and air infiltration are the factors that affect building heat loss in the winter. In most cases conduction and infiltration are the primary causes of building heat loss. Wind speed is a primary contributor to air infiltration rates in buildings. So basically, the faster the wind blows the more heating required. All things being equal a cold windy day will require more heating of buildings, than cold non-windy days. Of course on windy days the wind turbine generates electricity which would likely be coincident with the highest winter demand. Exh. CLF/SEBANE-TSM-1 at 12.

As Mr. Michelman also explained, wind generation also coincides with summer peaks because:

Most of the best wind resources in the NSTAR territories are close to the coastline. Peak demand during the summer usually occurs during hot summer afternoons. This is the same time when offshore winds blow strongest. That is, the land mass heats up during the hot summer day, hot air rises over land, and the cooler ocean air rushes in over land, which would induce wind turbine electricity production. Exh. CLF/SEBANE-TSM-1 at 13.

As Mr. Greene explained, PV also generation coincides with summer peaks because:

While PV is intermittent, it is closely correlated with utility system peaks. The reason is not surprising: in summer months, air conditioning load (resulting from high temperatures and high humidity) is strongly influenced by insolation levels. Figure 1 below, illustrates this point. This graph plots the output of a Massachusetts-based photovoltaic generator relative to New England system loads, and hourly clearing prices, during the 2003 system peak of 24,573 MW reached on August 22, 2003.



Exh. CLF-SEBANE-1-4.

As Mr. Michelman explained, renewable generation at times of system peaks will help to moderate wholesale electricity prices. Exh. CLF/SEBANE-TSM-1 at 13 – 14.

Renewable DG also produces economic benefits for ratepayers by reducing the cost of compliance with the Renewable Portfolio Standard (“RPS”). As Messrs. Greene and Pereira explained, renewable DG increases the supply of renewable energy certificates (“RECs”) needed for RPS compliance. This in turn will reduce the cost of those certificates and thus RPS compliance costs. Since all retail electricity suppliers must comply with the RPS, this will lead to lower costs for ratepayers. Exh. SEBANE-AGG-1 at 23; Exh. DOER-AEP-1 at 15.

Renewable DG also creates environmental benefits in the form of reduced emissions of CO₂, SO₂, NO_x and other pollutants and thus assists in meeting Clean Air

Act requirements and climate change goals. Exh. CLF/SEBANE-TSM-1 at 12; Exh. NSTAR-CLF-1-15; Exh. CLF-SEBANE-1-2; Exh. CLF-SEBANE-1-3.

2. Renewable DG should be Exempt because it is the Policy of the Commonwealth of Massachusetts to Support Renewable Generation.

Massachusetts has adopted a policy of supporting renewable generation because of the many benefits it provides. This policy is reflected throughout the General Laws, including in:

- ?? The Massachusetts Renewable Energy Trust, which provides financial incentives for the development of renewable resources, M.G.L. c. 40J, §4E;
- ?? The Renewable Portfolio Standard, which requires retail electricity suppliers to include an increasing percentage of renewables in their supply mix; M.G.L. c. 25A, §11F
- ?? A state income tax credit for individuals who install renewables, M.G.L. c. 62; §6(d);
- ?? A state sales tax exemption, M.G.L. c. 64H, §6(dd)
- ?? A local property tax exemption, M.G.L. c. 59, §5;
- ?? A corporate income tax deduction, M.G.L. c.63, § 38H

Accordingly, the Settlement Agreement reflects the public interest, expressed throughout the General Laws, of supporting renewable generation.

B. The Settlement Agreement Exempts Small DG

The Settlement Agreement appropriately exempts small DG from standby rates. The agreement exempts DG that is no greater than 250 kW, and exempts DG no greater than 1,000 kW as long as it serves less than 30% of the customer's internal load.

It is undisputed in the record that DG below a certain size is too small to have an impact on the distribution system. Such DG should be exempt from standby rates.

It is also undisputed that DG below a certain percentage of the customer's peak load should be exempt from standby rates. This is because the load variability of such customers is no different than the load variation of customers without DG. Accordingly, these DG customers do not impose extraordinary costs on the distribution system and should not be subject to extraordinary rates. As Mr. LaMontagne explained in his rebuttal testimony:

In discussing further with company personnel with regard to the costs of providing service for standby customers, the company determined that there was a certain level of variability in the standby customers' loads that was not particularly significant in the design process that the company's distribution planners would use for purposes of designing the distribution system. We determined that that level of variability for the forgiveness, in terms of the application of the standby rate, should be related to some degree to the level of variability that non-on-site generation customers exhibit in their loads. Tr. Vol. 3 at 367 – 368.

Accordingly, the Settlement Agreement is in the public interests and consistent with Department policy because it appropriately exempts small DG from standby rates.

III. Conclusion

SEBANE respectfully requests that the Department approve the Settlement Agreement.

Respectfully submitted,

SOLAR ENERGY BUSINESS
ASSOCIATION OF NEW ENGLAND

By its attorney,

Paul W. Gromer
Peregrine Energy Group
151 Merrimac St.
Boston, MA 02114
(617) 367-0777

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